

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A phosphor thin film on a support comprising:
a matrix material expressed by a composition formula $A_xB_yO_wS_z$,
A representing at least one element selected from the group consisting of Mg, Ca, Sr, Ba, and Zn,
B representing at least one element selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu,
molar ratios being respectively set as $0 < x < 5$, $0 < y < 4$, $0 \leq z < 8$, and $0 \leq w < 8$, and
 $0 = z = w$ never holding true, and
a substance functioning as a luminescence center in the matrix material,
wherein the matrix material satisfies $0.001 < w/(z+w) < 0.6$.
2. (Original) The phosphor thin film according to claim 1,
wherein the substance functioning as the luminescence center is any of Mn and a Mn compound.
3. (Original) The phosphor thin film according to claim 1,
wherein the substance functioning as the luminescence center is any of Eu and a Eu compound.
4. (Original) The phosphor thin film according to claim 1,
wherein the substance functioning as the luminescence center is any of Ce and a Ce compound.
5. (Canceled)
6. (Original) An electroluminescence panel comprising:
the phosphor thin film according to claim 1.

7. (Currently Amended) A method of manufacturing a phosphor thin film comprising:

forming a thin film by vapor deposition using a single vapor source including at least one element selected from the group consisting of Mg, Ca, Sr, Ba, and Zn, any of an oxide and a sulfide of at least one element selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu, having formula $A_xB_yO_wS_z$

~~_____ A representing at least one element selected from the group consisting of Mg, Ca, Sr, Ba, and Zn,~~

~~_____ B representing at least one element selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu,~~

~~_____ molar ratios being respectively set as $0 < x < 5$, $0 < y < 4$, $0 \leq z < 8$, and $0 \leq w < 8$, and~~

~~_____ $0 = z = w$ never holding true, and a substance functioning as a luminescence center;~~
and

annealing the formed thin film to form the phosphor thin film, wherein the phosphor thin film has a formula $A_xB_yO_wS_z$,

_____ A representing at least one element selected from the group consisting of Mg, Ca, Sr, Ba, and Zn,

_____ B representing at least one element selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu,

_____ molar ratios being respectively set as $0 < x < 5$, $0 < y < 4$, $0 \leq z < 8$, and $0 \leq w < 8$, and

_____ $0 = z = w$ never holding true.